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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/521,479 | 01/18/2005 | Teemu Makinen | 39700-582N01US/NC16997US | 6987 |
| 64046 7590 10/20/2009 MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C. ONE FINANCIAL CENTER BOSTON, MA 02111 | | | | |
| EXAMINER | | | | |
| FOUD, HICHAM B | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 2467 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/521,479

Applicant(s)

MAKINEN ET AL.

Examiner

HICHAM B. FOUD

Art Unit

2467

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-8 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-8 and 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/18/2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION
Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/31/2009 has been entered.

Response to Amendment

2. The amendment filed on 08/31/2009 has been entered and considered.

Claims 1, 4-8 and 11-14 are pending in this application.

Claims 2-3, 9-10 and 15 have been canceled.

Claims 1, 4-8 and 11-14 remain rejected as discussed below.

Drawings

3. Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81(c). No new matter may be introduced in the required drawing. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4-8 and 11-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For claim 1, the term "said new serving system node" in lines 4 and 11 and the term "the new serving system address" in line 13 have no antecedent basis. Similar issues occur in claim 8.

Claim 1 is vague and indefinite because it recites that the serving system informs the interception system of the serving system address of the serving node (see lines 8-10), then in lines 15-17 recites that a gateway informs the interception system of the serving system address of the serving node. Therefore, it is not known/clear why the interception system is being informed twice from different nodes. Thus, it is not known the metes and the bounds of the claimed invention. Similar issues occur in claims 8 and 14.

Claims 4-7 and 11-13 are rejected because of their dependency on the rejected claim.

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 8 and 11-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

For claim 8, the term "a processor" is considered similar to a "means" because it does not recite specific "structure, material or acts in support thereof" for performing the recited functions (i.e., the corresponding method steps recited in claim 1). Since there is only one recited "means" (the "processor") in independent claim 8, the claim is, in effect, single means claim that are improper under 35 U.S.C. 112, first paragraph. In essence, the claim covers *every conceivable means* for achieving the desired result (i.e., implementing the method of claim 1). The specification, however, discloses only those means known to applicant. See *In re Hyatt*, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983). Consequently, the specification is non-enabling for failing to disclose all possible means for performing the stated function and independent claim 8 constitutes improper single means claim.

Claims 11-13 are rejected because of their dependency on the rejected claim.

Claim Objections

7. Claims 1, 4-8 and 11-14 are objected to because of the following informalities:

Claims 1, 4-8 and 11-14 use the term "the target" and "the intercepted target" interchangeably which seems to refer back to the same thing. The applicant is requested to use only one term to overcome a potential confusion.

For claim 1, the term "an serving system node" in line 8 needs to be changed to -- a serving system node--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 5, 6, 8, 11-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Josse et al (US 6,104,929) hereinafter is referred to as Josse in view of Sjoblom (US 7,310,331).

The claims are rejected as best understood.

For claim 1, Josse discloses a method comprising the steps of: detecting a serving system node change request from a target (MS) towards a serving system node which is currently not serving the target (see Figure 4A step 4-1 and column 12 lines 9-19; the sending of a routing area update request message), processing said serving system node change request at said serving system node currently not serving the

target, wherein said processing comprises the inclusion, to the request, of a serving system address of the serving system node currently not serving the target (see Figure 4A step 4-2a and column 12 lines 22-27; the inclusion of the new SGSN address); forwarding said processed request to an serving system node currently serving the target (see Figure 4A step 4-2a and column 12 lines 22-27; wherein the request is sent to the old SGSN); detecting, at the new serving system node currently not serving the target, at least one active communication context for said target (see at least Figure 4A steps 4-4a to 4-4b and column 12 lines 64-67; PDP context operations), generating a communication context update request to which is included the new serving system address of the serving system node currently not serving the target (see Figure 4A step 4-6 and column 13 lines 33-38; wherein the use of the update SGSN address request message that contains the address of the new SGSN), and forwarding said generated request to a gateway serving system node of the serving system currently serving the target (see Figure 4A step 4-6 and column 13 lines 33-38; wherein the update SGSN address request message is sent from the new SGSN to the GGSN). Josse discloses all the subject matter with the exception of wherein the method is for informing a lawful interception system of the serving system serving an intercepted target (MS). However, Sjoblom discloses a method wherein the serving system/GGSN informs the lawful interception system of the serving system serving an intercepted target (MS) (see Figure 1 and column 1 line 27 to column 2 line 48; wherein GSN "element 3" is connected to the lawful interception system LEA "element 1" and sending information through the interfaces X0_1, X0_2 and X0_3; such as IRI which is the interception

related information). Thus, it would have been obvious to the one skill in the art at the time of the invention to have a connectable lawful interception system to the GSN system as taught by Sjoblom into the method of Josse for the purpose of interception of information and therefore performing a lawful interception.

For claims 5 and 11, Josse discloses a method wherein said serving system address of the serving system node represents information about the serving system to which said serving node belongs (see column 12 lines 35-38; the new address represents information, to which said new serving node belongs, that is required to allow the old SGSN to forward packets to the new SGSN until the old MM context is cancelled).

For claims 6 and 12, Josse discloses a method, wherein said information about the serving system to which said serving node belongs comprises at least one of the following information items: serving node number, serving node routing area identifier, and serving node address (see column 12 lines 26-28; the new address, RAI).

Claims 8 and 14 are rejected for same reasons as claim 1, because it would have been obvious to the one skill in the art at the time of the invention to implement a method into an apparatus for the purpose of making the devices to function as directed by the method.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Josse in view of Sjoblom and further in view of Miettinen et al (US 6,754,834) hereinafter is referred to as Miettinen.

For claim 4, Sjoblom further discloses that GSN node detects and transmits IRI (interception related information) to the lawful interception system, wherein the GSN node can be either SGSN or GGSN (see Sjoblom Fig. 3, column 6 lines 20-25 and column 7 lines 14-16). Josse in view of Sjoblom discloses all the subject matter with the exception of explicitly disclosing wherein said gateway serving system node currently serving the target informs the interception system of the new serving system address of the serving system node. However, Miettinen discloses that the IRI may include location information that is related to roaming since the location information changes according to the location (see Miettinen column 6 lines 27-35). Thus, it would have been obvious to the one skill in the art at the time of the invention to use the interception method as described in Miettinen into the method of Josse in view of Sjoblom to include the address of the new SGSN in the IRI sent by either SGSN (old or new) or GGSN to the interception system for the purpose of performing a lawful interception that intercepts the target even when the target is roaming in different cells.

10. Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Josse in view of Sjoblom and further in view of Neumann (US 6,792,270).

For claims 7 and 13, Josse in view of Sjoblom discloses all the subject matter with the exception of explicitly disclosing wherein said serving node routing area identifier comprises information items representative of a mobile country code, mobile network code, location area code, and routing area code. However, Neumann discloses a method wherein said serving node routing area identifier contains information items representative of a mobile country code MCC, mobile network code

MNC, location area code LAC, and routing area code RAC (see column 5 lines 26-29). Thus, it would have been obvious to the one skill in the art at the time of the invention to use the component of the RAI as disclosed in the invention of Neumann into the method of Josse in view of Sjoblom for the purpose of clearly identifying a routing area worldwide.

Response to Argument

11. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.
12. Applicant's arguments filed have been fully considered but they are not persuasive:

In regard of the argument in page 7 of the Remarks concerning the drawings, the examiner disagrees with the applicant because it is admitted by the applicant that Figures 2 and 3 are taken from 3GPP TS 23.060 (see specification page 11 line 28 and page 18 line 11). Moreover, in Figure 1, besides the admission of the applicant that Figure 1 shows a reference configuration for GPRS (see specification page 11 line 1) and well described in the BACKGROUND OF THE INVENTION section of the instant application, it is shown in Sjoblom "2nd reference"; which was filed prior to the instant application; as PRIOR ART (see Sjoblom: Figure 1) and also specified in TS 33.107 (see 3GPP TS 33.107 V5.2.0 page 9 Figure 1b). Thus, the Figures 1-3 are prior art and must be labeled as prior art. Moreover, the applicant lacks argument in regard of the Drawing (The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention).

In response to applicant's arguments in pages 8-11 of the Remarks against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Furthermore, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992) (see the rejection above). Moreover, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

13. Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as

well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

When responding to this office action, applicants are advised to clearly point out the patentable novelty which they think the claims present in view of the state of the art disclosed by the references cited or the objections made. Applicants must also show how the amendments avoid such references or objections. See 37C.F.R 1.111(c). In addition, applicants are advised to provide the examiner with the line numbers and pages numbers in the application and/or references cited to assist examiner in locating the appropriate paragraphs.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HICHAM B. FOUAD whose telephone number is (571)270-1463. The examiner can normally be reached on Monday - Friday 10-6 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pankaj, Kumar can be reached on 571-272-3011. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Hicham B Foud/

Examiner, Art Unit 2467

10/15/2009

/Hong Cho/

Primary Examiner, Art Unit 2467